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COLTD

## SEMICONDUCTOR DEVICE (54) PRODUCTION OF

(57) Abstract:

a low-pressure CVD method using a silicon oxide film that is formed by single crystal semiconductor layer on at a specific low temperature. disilane or trisilane and crystalizing it performance by forming a true non-PURPOSE: To obtain a high

on a glass 50 that is inexpensive such CONSTITUTION: A silicon oxide film is formed as a blocking layer 51

obtaining higher carrier mobility of 450-700°C, and a silicon film 52 is atmosphere of non-oxide for 12 to 70 crystalization temerature. Then, after pressure vapor method at 450-550°C disilane or trisilane is supplied most 700°C, by using a high withstand the heat treatment of at as quartz glass, etc., and can and 56 are formed thereon by using right side of the glass 50 and an area area 22 for a PTHT is formed on the without grain boundary. The film 52 to higher-order state, thereby changed from an amorphous structure hours at an intermediate temperature a slicon film in an amorphous state is that is 100-200°C lower than the through for film formation by a low frequency sputtering method. A insulation film 54. the silicon oxide film as a gate respectively, then gate electrodes 55 is subjected to photoetching, and an formed, it is entirely annealed in an 13 on the left side thereof,

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